



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9385; Directorate Identifier 2016-NM-111-AD; Amendment 39-18844; AD 2017-07-06]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Gulfstream Aerospace Corporation Model G-1159B airplanes. This AD was prompted by a review of airplane maintenance records, which revealed that incorrect rudder assemblies were installed on certain airplanes. This AD requires certain inspections, and replacement or modification of the rudder assembly if necessary. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; fax 912-965-3520; email pubs@gulfstream.com; Internet http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm. You may view this referenced service information at the FAA, Transport Airplane

Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9385.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9385; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Krista Greer, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office (ACO), 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5544; fax: 404-474-5606; email: krista.greer@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Gulfstream Aerospace Corporation Model G-1159B airplanes. The NPRM published in the Federal Register on November 21, 2016 (81 FR 83180). The NPRM was prompted by a review of airplane maintenance records, which revealed that incorrect rudder assemblies were installed on certain airplanes. The NPRM proposed to require an inspection to determine the part number of the rudder assembly installed, verification that the part number of the rudder assembly matches what is recorded in the airplane maintenance records, an inspection of the rudder hinges if

necessary, and replacement or modification of the rudder assembly if necessary. We are issuing this AD to detect and correct the installation of incorrect rudder assemblies, which could result in flutter and subsequent loss of the rudder, and consequent loss of control of the airplane.

Comments

We gave the public the opportunity to participate in developing this AD. We have considered the comment received.

Support for the NPRM

An anonymous commenter stated that the NPRM was understandable and that the FAA should retain its governmental authority.

We infer that the commenter supports the intent of the NPRM. We have not made any changes to this final rule regarding this issue.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

We reviewed Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016 (for Model G-1159 and Model G-1159B airplanes). The service information describes procedures for inspecting the rudder assembly to determine the part number, verifying that the part number of the rudder assembly matches what is recorded in the airplane maintenance records, inspecting the rudder hinges, and modifying the rudder

assembly. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 24 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$2,040

We estimate the following costs to do any necessary replacements or modifications that will be required based on the results of the inspection. We have no way of determining the number of aircraft that might need these replacements or modifications:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement/ modification	3 work-hours X \$85 per hour = \$255	\$51,445	\$51,700

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2017-07-06 Gulfstream Aerospace Corporation: Amendment 39-18844; Docket No. FAA-2016-9385; Directorate Identifier 2016-NM-111-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Gulfstream Model G-1159B airplanes, certificated in any category.

Note 1 to paragraph (c) of this AD: Model G-1159B airplanes are also referred to by marketing designation GIIB.

(d) Subject

Air Transport Association (ATA) of America Code 27; Flight Controls.

(e) Unsafe Condition

This AD was prompted by a review of airplane maintenance records, which revealed that incorrect rudder assemblies were installed on certain airplanes. We are issuing this AD to detect and correct the installation of incorrect rudder assemblies, which could result in flutter and subsequent loss of the rudder, and consequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection to Determine Rudder Assembly Part Number (P/N) and Verification

of Maintenance Records

Within 12 months after the effective date of this AD, do an inspection to determine the part number of the rudder assembly, in accordance with the Accomplishment Instructions of Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016, except as provided by paragraph (i)(1) of this AD. If the rudder assembly does not have P/N 1159CS20004-3, within 12 months after the effective date of this AD, verify that the rudder assembly part number recorded in the aircraft maintenance records matches the part number of the rudder assembly installed on the airplane and if the rudder assembly part number does not match, correct the aircraft maintenance records accordingly.

(h) Additional Inspection and Corrective Action

If, during the inspection required by paragraph (g) of this AD, a rudder assembly having P/N 1159CS20004-3 is found, before further flight, do a general visual inspection of the middle and upper rudder hinges to determine if a one-piece or two-piece hinge is installed, in accordance with the Accomplishment Instructions of Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016, and do the applicable action specified in paragraph (h)(1) or (h)(2) of this AD, except as required by paragraph (i)(2) of this AD.

(1) For airplanes with a one-piece hinge installed: Do the actions specified in paragraph (h)(1)(i) or (h)(1)(ii) of this AD.

(i) Modify the rudder assembly, in accordance with the Accomplishment Instructions of Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016.

Note 2 to paragraph (h)(1)(i) of this AD: Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016, refers to Gulfstream GII Aircraft Service Change

Number 300, Amendment 1, dated May 21, 1984, as an additional source of guidance for accomplishment of the rudder modification.

(ii) Replace the rudder assembly with a rudder assembly that has been modified as specified in Gulfstream GII Aircraft Service Change Number 300. Do the replacement using a method approved in accordance with the procedures specified in paragraph (k)(1) of this AD.

(2) For airplanes with a two-piece hinge installed: Re-identify the rudder assembly as having incorporated the actions in Gulfstream GII Aircraft Service Change Number 300, in accordance with the Accomplishment Instructions of Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016.

(i) Exceptions to Service Bulletin Specifications

(1) Where Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016, specifies to record the rudder part number and serial number on the service reply card, that action is not required by this AD.

(2) Where Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016, specifies to contact Gulfstream for instructions on modifying the rudder assembly, this AD requires modifying the rudder assembly before further flight using a method approved in accordance with the procedures specified in paragraph (k)(1) of this AD.

(j) Special Flight Permits

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information

directly to the manager of the ACO, send it to the attention of the person identified in paragraph (l) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) Except as required by paragraph (i) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(3)(i) and (k)(3)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(l) Related Information

For more information about this AD, contact Krista Greer, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office (ACO), 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5544; fax: 404-474-5606; email: krista.greer@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Gulfstream GII/IIB Customer Bulletin Number 468, dated February 17, 2016.

(ii) Reserved.

(3) For service information identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; fax 912-965-3520; email pubs@gulfstream.com; Internet http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on March 27, 2017.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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